

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listing of claims, in the Application.

Listing of claims:

1. (Currently amended) A method of improving performance in a multiprocessor system in which a processor has to contend with other processors for ~~that uses~~ a limited number of physical interfaces to ~~transact~~ transmit data to a network data comprising the steps of:  
  
determining whether data being processed is to be transmitted from the processor of the multiprocessor system to the network data; and  
  
associating a virtual Internet protocol (IP) address with a memory device in response to determining that the data being processed is to be transmitted from the processor of the multiprocessor system to the network; and  
  
transmitting the data from the processor of the multiprocessor system using the virtual IP address associated with the memory device as a destination IP address enabling the data to be transmitted from the processor of the multiprocessor system to the memory device, wherein the memory device contends, using a controller, for one of the limited number of physical interfaces to transmit the data to the network ~~transacting, if the data is network data, the data using a virtual Internet protocol (IP) address, the virtual IP address being an IP address given to a data holding device in the multiprocessor system.~~

2. (Currently amended) The method of Claim 1 wherein the memory data holding device is a buffer.
3. (Original) The method of Claim 2 wherein the buffer is implemented using memory allocation.
4. (Currently amended) The method of Claim ~~[[3]]~~ 2 wherein the buffer is a dedicated memory allocation ~~contends for access to one of the limited physical interfaces.~~
5. (Original) The method of Claim 4 wherein before transmitting the data to the physical interface, the virtual IP address is replaced by a destination IP address.
6. (Currently amended) A computer program product on a computer readable medium for improving performance of a multiprocessor system in which a processor has to contend with other processors for ~~that uses a~~ limited number of physical interfaces to ~~transact~~ transmit data to a network ~~data~~ comprising:

code means for determining whether data being processed is to be transmitted from the processor of the multiprocessor system to the network data; and

code means for associating a virtual Internet protocol (IP) address with a memory device in response to determining that the data being processed is to be transmitted from the processor of the multiprocessor system to the network; and

code means for transmitting the data from the processor of the multiprocessor system using the virtual IP address associated with the memory device as a destination IP address enabling the data to be transmitted from the processor of the multiprocessor system to the memory device, wherein the memory device contends, using a controller, for one of the limited number of physical interfaces to transmit the data to the network ~~code means for transacting, if the data is network data, the data using a virtual Internet protocol (IP) address, the virtual IP address being an IP address given to a data holding device in the multiprocessor system.~~

7. (Currently amended) The computer program product of Claim 6 wherein the memory ~~data holding~~ device is a buffer.
8. (Original) The computer program product of Claim 7 wherein the buffer is implemented using memory allocation.
9. (Currently amended) The computer program product of Claim [[8]] 7 wherein the buffer is a dedicated memory allocation ~~contends for access to one of the limited physical interfaces.~~
10. (Original) The computer program product of Claim 9 wherein before transmitting the data to the physical interface, the virtual IP address is replaced by a destination IP address.
11. (Currently amended) An apparatus for improving performance of a multiprocessor system in which a processor has to contend with other processors for ~~that uses~~ a limited number of physical interfaces to ~~transact~~ transmit data to a network ~~data~~ comprising:

means for determining whether data being processed is to be transmitted from the processor of the multiprocessor system to the network data; and

means for associating a virtual Internet protocol (IP) address with a memory device in response to determining that the data being processed is to be transmitted from the processor of the multiprocessor system to the network; and

means for transmitting the data from the processor of the multiprocessor system using the virtual IP address associated with the memory device as a destination IP address enabling the data to be transmitted from the processor of the multiprocessor system to the memory device, wherein the memory device contends, using a controller, for one of the limited number of physical interfaces to transmit the data to the network ~~means for transacting, if the data is network data, the data using a virtual Internet protocol (IP) address, the virtual IP address being an IP address given to a data holding device in the multiprocessor system.~~

12. (Currently amended) The apparatus of Claim 11 wherein the memory data holding device is a buffer.
13. (Original) The apparatus of Claim 12 wherein the buffer is implemented using memory allocation.
14. (Currently amended) The apparatus of Claim ~~[[13]]~~ 12 wherein the buffer is a dedicated memory allocation ~~contends for access to one of the limited physical interfaces.~~

15. (Original) The apparatus of Claim 14 wherein before transmitting the data to the physical interface, the virtual IP address is replaced by a destination IP address.

16. (Currently amended) A multiprocessor system having means for improving performance for transmitting data to a network using a limited number of physical interfaces for which a processor has to contend with other processors for comprising:

at least one memory device to store code data; and

using one of the processors for processing the code data to determine whether data being processed is to be transmitted from the processor of the multiprocessor system to the network data, and to associate a virtual Internet protocol (IP) address with a memory device in response to determining that the data being processed is to be transmitted from the processor of the multiprocessor system to the network, and to transmit the data from the processor of the multiprocessor system using the virtual IP address associated with the memory device as a destination IP address enabling the data to be transmitted from the processor of the multiprocessor system to the memory device, wherein the memory device contends, using a controller, for one of the limited number of physical interfaces to transmit the data to the network ~~to transact, if the data is network data, the data using a virtual Internet protocol (IP) address, the virtual IP address being an IP address given to a data holding device in the multiprocessor system.~~

17. (Currently amended) The multiprocessor system of Claim 16 wherein the memory data holding device is a buffer.

18. (Original) The multiprocessor system of Claim 17 wherein the buffer is implemented using memory allocation.
19. (Currently amended) The multiprocessor system of Claim ~~[[18]]~~ 17 wherein the buffer is a dedicated memory allocation ~~contends for access to one of the limited physical interfaces.~~
20. (Original) The multiprocessor system of Claim 19 wherein before transmitting the data to the physical interface, the virtual IP address is replaced by a destination IP address.